

REMARKS

This amendment is submitted in response to the outstanding Final Office Action, Paper No. 20050505, dated May 9, 2005. The pending claims in the application are claims 19, 22, 39 and 40. Claims 39 and 40 have been withdrawn from consideration. New claims 41 and 42 have been added. Favorable reconsideration of the application, and a Notice of Allowance, are respectfully requested.

Claims 19 and 22 were rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 4,362,780 to Marzocchi et al. Claim 19 recites a method of improving a paved surface by applying a mat having a minimum ultimate elongation of at least 5%, and having a load-elongation behavior such that when the mat is subject to tensile stress, the mat achieves at least 90% of its ultimate load at an elongation not greater than 5% of the specimen length in the direction of applied stress. The Examiner stated that the properties of the mat are not afforded patentable weight because they do not affect the method steps, the order of the steps performed, or the manner in which the method steps are performed. Applicants respectfully disagree with this reasoning. Claim 19 positively recites applying a mat produced from fibers having a melting point above 330°F, and the mat having the defined elongation properties. The use of this particular type of mat clearly affects the manner in which the method is performed; i.e., the method is performed by applying this type of mat. The use of this particular type of mat is critical to the method of the invention. The prior art does not disclose such a method using a mat having the defined properties.

Therefore, it is submitted that the properties of the mat should be afforded patentable weight. As discussed in the previous amendment, the Marzocchi et al. mat is described as being "board-like" and "rigid" or "semi-rigid". The mat has a thickness between one-eighth inch and five inches. During manufacture of the mat, the mat is asphalt-impregnated, and the asphalt is set or congealed so that the product has a desired thickness and density. These descriptions of the mat suggest that the mat is rigid or semi-rigid and cannot be stretched to any substantial degree. Consequently, the mat would not have a minimum ultimate elongation of at least 5% as recited in

claim 19. There is nothing in the Marzocchi et al. patent to suggest using a mat that is stretchable such that it has a minimum ultimate elongation of at least 5%, and that has a load-elongation behavior such that when the mat is subject to tensile stress, the mat achieves at least 90% of its ultimate load at an elongation not greater than 5% of the specimen length in the direction of applied stress.

Moreover, claim 19 also differs from Marzocchi et al. in reciting that the liquefied asphalt on the surface penetrates and soaks the mat after the mat is applied over the liquefied asphalt. As discussed above, the Marzocchi et al. mat is pre-impregnated with asphalt during its manufacture, and the asphalt is set or congealed. Consequently, when the Marzocchi et al. mat is applied over liquefied asphalt on a surface, the liquefied asphalt does not penetrate and soak the mat. The liquefied asphalt is not drawn into the mat because the mat has been previously impregnated with asphalt and the asphalt has been set or congealed. The asphalt already impregnating the mat acts as a barrier that resists penetration of the mat by the liquefied asphalt on the surface.

Therefore, it is respectfully submitted that claim 19 is novel and nonobvious in view of the Marzocchi et al. patent. For at least the same reasons, it is submitted that dependent claim 22 is also novel and nonobvious over the cited patent.

New claim 41 is similar to claim 19, except that the language has been modified to more directly describe the elongation and the load-elongation properties of the mat in relation to a load applied to the paved surface. This language is the type suggested by the Examiner at page 6 of the Final Office Action, and it does not raise any issues that have not already been considered by the Examiner, and therefore entry of the new claim is respectfully requested. Although new claim 41 is being submitted in response to the Examiner's suggestion, Applicants submit that claim 19 also positively recites the use of a mat having the elongation and load-elongation properties, and thus these properties should be given patentable weight in claim 19 as described above. From the original language of claim 19, it is clear that the elongation and load-elongation properties of the mat are effective in relation to a load applied on the paved surface after the mat has been installed to improve the paved surface.

Claims 39 and 40 have been withdrawn from consideration by the Examiner because claim 39 recites shrinkage resistance properties of the mat in combination with the elongation and load-elongation properties recited in claim 19. Applicants respectfully submit that the restriction of claim 39 is unreasonable. Claim 39 is simply a combination of claim 19 and dependent claim 21 which recited the shrinkage resistance properties. It should be noted that the original restriction requirement, mailed on July 14, 2004, restricted the original claims into seven groups. Applicants elected group VI, claims 19-22, characterized by the Examiner as being drawn to a method of improving a paved surface comprising the steps of applying a layer of liquefied asphalt, and applying a mat over the liquefied asphalt, classified in class 404, subclass 75. Thus, dependent claim 21 was in the same elected group as independent claim 19. Claim 39 simply combines the two claims 19 and 21 from the elected group. Applicants respectfully submit that it would be unreasonable at this point in the prosecution to reverse the original decision that dependent claim 21 is in the same group as independent claim 19, in order to require the restriction of claim 21 (which is new claim 39) from claim 19. Therefore, the Examiner is respectfully requested to consider the patentability of claim 39 and dependent claim 40.

Applicants respectfully submit that claim 39 is novel and nonobvious in view of the Marzocchi et al. patent for at least the same reasons described above. Moreover, there is no mention in Marzocchi et al. of any shrinkage resistance properties of the mat, as recited in claim 39. It is also submitted that dependent claim 40 is novel and nonobvious for at least the same reasons.

In view of the above remarks, Applicants have shown that the claims are in proper form for allowance, and the invention, as defined in the claims, is neither disclosed nor suggested by the references of record. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections and objections of record, and allowance of all claims.